

PAVEMENT, CURB, GUTTER, SIDEWALK

ITEM 300

PART 1 - GENERAL

WORK INCLUDED: (Sec. 01) Furnish all labor, materials and equipment necessary to construct all pavement, curb, gutter, sidewalk and related work as indicated on the Drawings and specified.

DESCRIPTION: (Sec. 02) New work shall be indicated on the Drawings, using material and course thickness as specified hereinafter.

Restoring/replacement work shall be performed with material similar to existing, as indicated on the Drawings, using material and course thickness as specified hereinafter.

QUALITY ASSURANCE: (Sec. 03) All materials shall be new and of the best quality.

REFERENCES: (Sec. 04)

ODOT - Ohio Department of Transportation, Construction and Material Specifications.

ASTM - American Society for Testing and materials.

DELIVERY, STORAGE, HANDLING: (Sec. 05) Bituminous material shall be heated and delivered to job site within the temperature range specified in ODOT 702.00. Bituminous material shall not be used while foaming.

Aggregate shall be fed to the cold elevator in proper proportions and at a rate to permit correct and uniform control of heating and drying.

Concrete may be mixed in a central mix plant, or in truck mixers, of an approved type.

Ready-mix concrete shall be mixed and delivered in accordance with ODOT 499.04

(a) Mixed concrete from the central mixer shall be transported in truck mixers or truck agitators.

Concrete shall be delivered to the work site and discharge completed within one hour after the combining of the water and the cement. If approved set-retarding (ODOT) 705.12, Type B) or a water-reducing and set-retarding (ODOT 705.12, Type D) admixture is used at the Contractor's expense, complete discharge within 90 minutes of the combining of the water and the cement.

PAYMENT: (Sec. 06) As specified.

For unit price proposals payment for Prime and Tack Coats used in conjunction with asphalt concrete is included with the asphalt concrete.

For unit price proposals for resurfacing, payment for Tack Coats, pothole and crack repair is included with the unit price bid for resurfacing. The method of repair shall be approved by the engineer.

WARRANTY: (Sec. 07) See General Conditions.

PART 2 - PRODUCTS

MATERIALS: (Sec. 08) Materials shall conform to the latest ODOT specifications as follows:

Subbase - Item 310

Aggregate - Item 304

Berm/shoulder - Item 617

Portland Cement Concrete Base - Item 305

Reinforced Portland Cement Concrete Pavement - Item 451

Plain Portland Cement Concrete Pavement - Item 452

Asphalt Concrete Intermediate Course - Item 402

Asphalt Concrete Surface Course - Item 404

Prime Coat Item 408

Bituminous material - MC-30 or MC-70

Cover aggregate - per Item

Tack Coat - Item 407, SS-1 emulsion

Cover aggregate - per Item

Seal Coat - Item 409

Bituminous material - MWS 90
(RS-2 when temperature 90⁰+))

Cover aggregate per Item
First course - No. 67 size
Surface course - No. 9 size

Bituminous Cold Mix - Item 405

Curb/Gutter - Concrete, Item 609

Sidewalk - Concrete, Item 499, Class C

Parking Blocks - precast concrete approximately seven inches high, six feet long. Anchor with steel rods, one-half inch diameter by fifteen long.

Paint (striping) - Item 621

Expansion material - three-quarter inch premolded asphalt plank.

PART 3 - EXECUTION

INSTALLATION: (SEC. 09) Installation/construction methods shall conform to the latest ODOT specifications.

Preparation of Subgrade

Prior to placing pavement base or sidewalk, blade, and compact subgrade to the proper elevation indicated on the Drawings. Compact in accordance with ODOT Specifications Item 203. Include the cost of Patch existing pavement using straight lines cut perpendicular of parallel to line of traffic where possible.

Subbase

Construct a ten inch thick subbase, consisting of two compacted five inch courses, in accordance with ODOT Specifications Item 310.

Aggregate Base

Construct a six inch or nine inch thick aggregate base course in accordance with ODOT Specifications Item 304. Slag material not permitted.

Construct shoulders as indicated on the Drawings using material specified in ODOT Specifications Item 617.

Portland Cement Concrete Base

Construct an eight inch concrete base in accordance with ODOT Specifications Item 305. Moisten subgrade before placing concrete. Place expansion material at interface between new and existing concrete base.

Portland Cement Concrete Pavement

Construct six inch or eight inch thick reinforced concrete pavement in accordance with ODOT Specifications, Item 451. Reinforcing steel shall be as indicated on the Drawings.

Place six inch or eight inch plain concrete pavement in accordance with ODOT Specifications Item 452.

Place expansion material and discontinue reinforcing at interface between new and existing pavement. Use high early strength Portland cement, ASTM C-150, Type III or IIIA, with entrained air at locations requiring quick opening to traffic as directed by the Owner. Any extra payment for use of high strength cement shall be agreed upon between the Contractor and the Owner prior to its use.

Asphalt Concrete Pavement

Construct one and one-half inch thick pavement in one course (402). Construct three inch thick asphalt concrete pavement in two equal thickness courses. The first course shall be in accordance with ODOT Specifications Item 402 and the surface course shall be in accordance with ODOT Specifications Item 404. When asphalt concrete is placed over concrete base apply Tack Coat over the concrete base at the rate of 0.1 gallons per square yard of surface in accordance with ODOT Specifications Item 407. When asphalt concrete is placed over aggregate base apply Prime Coat at the rate of 0.4 gallons per square yard of surface in accordance with ODOT Specifications Item 408. Apply Tack Coat between asphalt concrete courses at the rate of 0.1 gallons per square yard in accordance with ODOT Specifications Item 407.

Material consistency and application rates for prime and tack coats may be varied to suit weather conditions, with the approval of the Resident Representative. For unit price proposals no payment for Prime Coat will be made if prime coat is included in another Item.

Apply tack coat to edges of existing curbs, pavements, gutters, manhole castings, etc., prior to placing asphalt concrete. Seal and sand all finished joints.

Seal Coat

First course shall consist of applying bituminous material at rate of 0.35 gallons per square yard followed immediately with cover coat of 20-22 pounds of aggregate.

Second course shall consist of 0.35 gallons per square yard followed immediately by cover coat of 23-25 pounds per square yard.

Prime Coat

Apply prime coat in accordance with ODOT Specifications Item 408, at rate of 0.4 gallons per square yard. Coat with sand if traffic will be allowed to run on surface prior to pavement surface application. Material consistency and application rates for prime coat may be varied to suite weather conditions with the approval of the Resident Representative. For unit price proposals no payment for Prime Coat will be made if prime coat is included in another Item.

Temporary Bituminous Payment

Furnish, place and maintain a temporary bituminous pavement in accordance with ODOT Specifications Item 405 wherever directed by the Resident Representative. Remove a sufficient amount of existing aggregate so that a minimum thickness of two inches of temporary pavement may be placed. Maintain temporary paving until permanent pavement is placed.

Curbs/Gutters

Construct new or replacement concrete curbs or integral concrete curbs and gutters in accordance with ODOT Specifications Item 609. New curbs or integral curbs and gutters shall be constructed as indicated on the Drawings; replacement curbs or integral curbs and gutters shall match existing shape and dimensions. This Item also includes the removal and disposal of existing concrete material.

Concrete Sidewalk

Construct sidewalks as indicated on the Drawings using concrete in accordance with ODOT Specifications Item 499. Width of sidewalks shall be four feet for new installations or shall match width of existing sidewalks for replacement installations. Place transverse crack control joints at approximately five foot intervals. Place one-half inch expansion joint material at intervals not to exceed forty feet, at tee intersections, 90° bends in sidewalk and at intersections with structures. Finish all edges with one-quarter inch radius. Surface shall have wood float finish. This Item also includes the removal and disposal of existing sidewalk material, if not included with excavation Item 120.

Parking Blocks

Furnish and place precast concrete parking blocks where indicated on the Drawings.

Paint Striping

All paint striping shall be included with the surface pavement item of which it is a part. Striping of new pavement shall be as indicated on the Drawings; striping of replacement pavement shall match existing striping. Striping shall be in accordance with ODOT Specifications Item 621.

Resurfacing

Clean the existing pavement, clean and repair existing potholes and significant cracks as approved by the engineer. Tack Coat shall be applied as per ODOT Item 407. Place one and one half inch asphalt concrete overlay ODOT Item 404.

<u>Item No.</u>	<u>Type Pavement</u>	<u>Total Thickness</u>
300A	Portland Cement Concrete Base	Eight inches
300B	Reinforced Portland Cement Concrete Pavement	Eight inches
300C	Reinforced Portland Cement Concrete Pavement	Six inches
300D	Plain Portland Cement Concrete Pavement	Eight inches
300E	Plain Portland Cement Concrete Pavement	Six inches
300F1	Asphalt Concrete (402)	One & one-quarter inch
300F2	Asphalt Concrete (404)	One & one-quarter inch
300G	Asphalt concrete	Three inches (One & one-half inches 404 on One & one-half inches of 402)
300H	Aggregate Base Course	Six inches
300I	Aggregate Base Course	Nine inches
300J	Subbase	Ten inches
300K	Prime Coat	
300L	Seal Coat	
300M	Temporary Bituminous Pavement	Two inches

300N	Curb and Gutter	
300P	Concrete Sidewalk	Four inches
300Q	Parking Blocks	
300R	Resurfacing	One & one half inches